

May 18, 2022

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Planning and Development
City of Duluth
411 West First Street
Duluth, MN 55802

TIF ANALYSIS FINDINGS FOR THE DULUTH CENTRAL HIGH SCHOOL SITE

LHB was hired to inspect two buildings on the former Central High School campus in Duluth, Minnesota, to determine if they meet the definition of “Substandard” as defined by *Minnesota Statutes, Section 469.174, subdivision 10*. The building parcels may potentially be part of a future Redevelopment TIF District, so will need to be compliant with all the statutes pertaining to a Redevelopment District.

The buildings are located on the former Central High School campus on East Central Entrance (see Diagram 1).



Diagram 1

CONCLUSION

After inspecting and evaluating the buildings on April 22, 2022 and applying current statutory criteria for a Redevelopment District under *Minnesota Statutes, Section 469.174, Subdivision 10*, it is our professional opinion that the buildings qualify as substandard.

The remainder of this letter and attachments describe our process and findings in detail.

MINNESOTA STATUTE 469.174, SUBDIVISION 10 REQUIREMENTS

The properties were inspected in accordance with the following requirements under *Minnesota Statutes, Section 469.174, Subdivision 10(c)*, which states:

INTERIOR INSPECTION

"The municipality may not make such determination [that the building is structurally substandard] without an interior inspection of the property..."

EXTERIOR INSPECTION AND OTHER MEANS

"An interior inspection of the property is not required, if the municipality finds that

(1) the municipality or authority is unable to gain access to the property after using its best efforts to obtain permission from the party that owns or controls the property; and

(2) the evidence otherwise supports a reasonable conclusion that the building is structurally substandard."

DOCUMENTATION

"Written documentation of the findings and reasons why an interior inspection was not conducted must be made and retained under section 469.175, subdivision 3, clause (1)."

QUALIFICATION REQUIREMENTS

Minnesota Statutes, Section 469.174, Subdivision 10 (a) (1) requires two tests for occupied parcels:

1. Coverage Test

"...parcels consisting of 70 percent of the area of the district are occupied by buildings, streets, utilities, or paved or gravel parking lots..."

The coverage required by the parcel to be considered occupied is defined under *Minnesota Statutes, Section 469.174, Subdivision 10(e)*, which states:

"For purposes of this subdivision, a parcel is not occupied by buildings, streets, utilities, paved or gravel parking lots, or other similar structures unless 15 percent of the area of the parcel contains buildings, streets, utilities, paved or gravel parking lots, or other similar structures."

The LHB team reviewed the following parcels:

Building A Parcel Number 010-2710-06120 (plus others TBD)

- The parcel is approximately 19.19 acres and is 20 percent covered by buildings, parking lots or other improvements.

Building B Parcel Number 010-2710-06203

- The parcel is approximately 10.50 acres and is 27 percent covered by buildings, parking lots or other improvements.

Findings

The parcels are covered by buildings, parking lots or other improvements, exceeding the 15 percent parcel requirement.

2. Condition of Buildings Test

Minnesota Statutes, Section 469.174, Subdivision 10(a) states:

"...and more than 50 percent of the buildings, not including outbuildings, are structurally substandard to a degree requiring substantial renovation or clearance;"

Structurally substandard is defined under Minnesota Statutes, Section 469.174, Subdivision 10(b), which states:

"For purposes of this subdivision, 'structurally substandard' shall mean containing defects in structural elements or a combination of deficiencies in essential utilities and facilities, light and ventilation, fire protection including adequate egress, layout and condition of interior partitions, or similar factors, which defects or deficiencies are of sufficient total significance to justify substantial renovation or clearance."

We do not count energy code deficiencies toward the thresholds required by *Minnesota Statutes, Section 469.174, Subdivision 10(b)* defined as "structurally substandard", due to concerns expressed by the State of Minnesota Court of Appeals in the *Walser Auto Sales, Inc. vs. City of Richfield* case filed November 13, 2001.

Findings

The two buildings exceed the criteria required to be determined a substandard building (see the attached Building Code, Condition Deficiency and Context Analysis Reports).

Buildings are not eligible to be considered structurally substandard unless they meet certain additional criteria, as set forth in *Subdivision 10(c)* which states:

"A building is not structurally substandard if it is in compliance with the building code applicable to new buildings or could be modified to satisfy the building code at a cost of less than 15 percent of the cost of constructing a new structure of the same square footage and type on the site. The municipality may find that a building is not disqualified as structurally substandard under the preceding sentence on the basis of reasonably available evidence, such as the size, type, and age of the building, the average cost of plumbing, electrical, or structural repairs, or other similar reliable evidence."

"Items of evidence that support such a conclusion [that the building is not disqualified] include recent fire or police inspections, on-site property tax appraisals or housing inspections, exterior evidence of deterioration, or other similar reliable evidence."

LHB counts energy code deficiencies toward the 15 percent code threshold required by *Minnesota Statutes, Section 469.174, Subdivision 10(c)* for the following reasons:

- The Minnesota energy code is one of ten building code areas highlighted by the Minnesota Department of Labor and Industry website where minimum construction standards are required by law.
- Chapter 13 of the *2015 Minnesota Building Code* states, "Buildings shall be designed and constructed in accordance with the International Energy Conservation Code." Furthermore, *Minnesota Rules, Chapter 1305.0021 Subpart 9* states, "References to the International Energy Conservation Code in this code mean the Minnesota Energy Code..."

- Chapter 11 of the *2015 Minnesota Residential Code* incorporates *Minnesota Rules, Chapters, 1322 and 1323 Minnesota Energy Code*.
- The Senior Building Code Representative for the Construction Codes and Licensing Division of the Minnesota Department of Labor and Industry confirmed that the Minnesota Energy Code is being enforced throughout the State of Minnesota.
- In a January 2002 report to the Minnesota Legislature, the Management Analysis Division of the Minnesota Department of Administration confirmed that the construction cost of new buildings complying with the Minnesota Energy Code is higher than buildings built prior to the enactment of the code.

Proper TIF analysis requires a comparison between the replacement value of a new building built under current code standards with the repairs that would be necessary to bring the existing building up to current code standards. For an equal comparison to be made, all applicable code chapters should be applied to both scenarios. Since current construction estimating software automatically applies the construction cost of complying with the Minnesota Energy Code, energy code deficiencies should also be identified in the existing structures.

Findings

The buildings have code deficiencies exceeding the 15 percent building code deficiency criteria required to be determined substandard (see the attached Building Code, Condition Deficiency and Context Analysis Reports).

TEAM CREDENTIALS

MICHAEL A. FISCHER, AIA, LEED AP - PROJECT PRINCIPAL/TIF ANALYST

Michael has 34 years of experience as project principal, project manager, project designer and project architect on planning, urban design, educational, commercial, and governmental projects. He has become an expert on Tax Increment Finance District analysis assisting over 100 cities with strategic planning for TIF Districts. He is an Architectural Principal at LHB and currently leads the Minneapolis office.

Michael completed a two-year Bush Fellowship, studying at MIT and Harvard in 1999, earning master's degrees in City Planning and Real Estate Development from MIT. He has served on more than 50 committees, boards, and community task forces, including City Council President in Superior, Wisconsin, Chair of the Duluth/Superior Metropolitan Planning Organization, and Chair of the Edina, Minnesota Planning Commission. Most recently, he served as a member of the Edina city council and Secretary of the Edina HRA. Michael has also managed and designed several award-winning architectural projects and was one of four architects in the Country to receive the AIA Young Architects Citation in 1997.

PHIL FISHER – INSPECTOR

For 35 years, Phil Fisher worked in the field of Building Operations in Minnesota including White Bear Lake Area Schools. At the University of Minnesota, he earned his Bachelor of Science in Industrial Technology. He is a Certified Playground Safety Inspector, Certified Plant Engineer, and is trained in Minnesota Enterprise Real Properties (MERP) Facility Condition Assessment (FCA). His FCA training was recently applied to the Minnesota Department of Natural Resources Facilities Condition Assessment project involving over 2,000 buildings.

ATTACHMENTS

We have attached a Building Code, Condition Deficiency and Context Analysis Report, Replacement Cost Report, Code Deficiency Report, and thumbnail photo sheets of the building.

Please contact me at (612) 752-6920 if you have any questions.

LHB, INC.

A handwritten signature in blue ink, appearing to read "MA Fischer", followed by a horizontal line and a period.

MICHAEL A. FISCHER, AIA, LEED AP

c: LHB Project No. 140705.01

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APPENDIX A

Building Code, Condition Deficiency and Context Analysis Report

Replacement Cost Report

Code Deficiency Report

Photographs

Central High School Redevelopment TIF District

Building Code, Condition Deficiency and Context Analysis Report

Parcel A

Former Duluth Central High School

Address: 800 East Central Entrance, Duluth, Minnesota 55811
Parcel ID: 010-2710-06120 Plus Multiple Others
Inspection Date(s) & Time(s): April 22, 2022, 10:30 am
Inspection Type: Interior and Exterior
Summary of Deficiencies: It is our professional opinion that this building is Substandard because:

- Substantial renovation is required to correct Conditions found.
- Building Code deficiencies total more than 15% of replacement cost, NOT including energy code deficiencies.

Estimated Replacement Cost:	\$46,168,976
Estimated Cost to Correct Building Code Deficiencies:	\$16,091,321
Percentage of Replacement Cost for Building Code Deficiencies:	34.9%

DEFECTS IN STRUCTURAL ELEMENTS

1. Steel supporting walkway around cafeteria should be protected from rusting per code.
2. Concrete pilasters supporting exterior cafeteria are cracked and damaged.
3. Steel lintels should be protected from rusting per code.
4. Masonry/concrete at above grade portions are damaged/missing allowing for water intrusion which is contrary to code.

COMBINATION OF DEFICIENCIES

1. Essential Utilities and Facilities
 - a. There are no code compliant accessible restrooms in the building.
 - b. Showers are not code compliant for accessibility,
 - c. Water fountains in the building are not code compliant for accessibility.
 - d. Accessible seating in the auditorium is not code compliant.
 - e. Interior signage does not comply with code.
 - f. The music mezzanine does not comply with code for accessibility.
 - g. There are no code required assistive listening devices in the auditorium.
 - h. There is no code compliant accessible route to all levels of the building.
2. Light and Ventilation
 - a. The lighting system does not comply with code.
 - b. The electrical wiring system does not comply with code.

- c. The HVAC system does not comply with code.
 - d. The kitchen dishwasher does not have a code required exhaust hood.
 - e. The kitchen lacks code required exhaust system.
3. Fire Protection/Adequate Egress
- a. The smoke detectors do not comply with code.
 - b. The emergency notification system is not code compliant.
 - c. Emergency lighting is not code compliant.
 - d. Emergency exit signage is not code compliant.
 - e. Through wall, floor, and ceiling penetrations are not properly fire caulked per code.
 - f. Exiting from the cafeteria to the exterior does not comply with code.
 - g. Thresholds do not comply with code for maximum height.
 - h. Science rooms do not have code required secondary exits.
 - i. Door hardware does not comply with code.
 - j. Typical guard rail openings exceed code required 4 inch spacing.
 - k. Concrete sidewalks are damaged creating an impediment to emergency egress which is contrary to code.
 - l. Exterior landings do not comply with code for height from threshold.
 - m. Stair rails do not comply with code.
 - n. Loading dock and small gym stair treads do not comply with code.
4. Layout and Condition of Interior Partitions/Materials
- a. Interior walls and ceilings are damaged from vandalism and roof leaks.
 - b. VCT and carpeting is damaged creating an impediment to emergency egress which is contrary to code.
 - c. Interior ACT ceilings should be replaced.
 - d. Walls should be repaired/repainted.
 - e. Damaged Asbestos Containing Building Material should be repaired and protected per code.
5. Exterior Construction
- a. Exterior doors are rusting and should be repainted.
 - b. Windows are broken/missing allowing for water intrusion which is contrary to code.
 - c. Expansion joint and window caulking is damaged/missing allowing for water intrusion which is contrary to code.
 - d. Roofing material is failing allowing for water intrusion which is contrary to code.

DESCRIPTION OF CODE DEFICIENCIES

- 1. Steel supports for the exterior cafeteria walkway should be protected from rusting per code.
- 2. Steel lintels should be protected from rusting per code.
- 3. Damaged/missing masonry should be repaired/replaced to prevent water intrusion per code.
- 4. Restrooms should be modified to comply with accessibility code.
- 5. Locker room showers should be modified to comply with accessibility code.
- 6. Code compliant water fountains should be installed.
- 7. Code required accessible seating should be installed in the auditorium.

8. The music mezzanine should be modified to comply with accessibility code.
9. Code required assistive listening devices should be installed in the auditorium.
10. A code compliant accessible route to all levels should be created within the building.
11. The lighting system should be modified to comply with code.
12. The electrical wiring system does not comply with code.
13. A code compliant HVAC system should be installed.
14. The kitchen dish washer should have a code required exhaust system installed.
15. The kitchen area should have a code required exhaust system installed.
16. Code compliant smoke detectors should be installed.
17. Code compliant emergency lighting should be installed.
18. Code compliant emergency exit signage should be installed.
19. Code required fire caulking should be installed in all through wall, floor, and ceiling penetrations.
20. Cafeteria exiting should be modified to comply with code.
21. Science rooms should have code required secondary exits installed.
22. Code compliant door hardware should be installed.
23. Guard rail opening should be modified to comply with code.
24. Damaged concrete sidewalks should be repaired/replaced to create a code required unimpeded means for emergency egress.
25. Exterior exit landings do not comply with code for maximum height to thresholds.
26. Stair rails should be modified to comply with code.
27. Loading dock and small gym stair treads should be modified to comply with code.
28. Damaged VCT and carpeting should be repaired/replaced to create a code required unimpeded means for emergency egress.
29. Repair/protect damaged ACBM to comply with code.
30. Failed/missing windows should be replaced to prevent water intrusion per code.
31. Failed caulking should be replaced to prevent water intrusion per code.
32. Failed roofing material should be replaced to prevent water intrusion per code.

OVERVIEW OF DEFICIENCIES

This High School building has been vacant for several years and is deteriorating from lack of maintenance. Vandals have gained entrance through broken windows and have begun damaging interior surfaces. Structural supports for the cafeteria walkway should be protected per code. Exterior walls, roofing material, and windows are failing allowing for water intrusion which is contrary to code. Roof leaks in several areas are causing ceiling tile damage. ACBM is not fully protected per code. Life safety systems are not fully code compliant. The building does not comply with current code for accessibility. The electrical wiring system and lighting systems do not comply with code. The HVAC system does not comply with code. There are code deficiencies in the kitchen exhaust systems. The restrooms are not code compliant for accessibility. The locker room showers do not comply with code for accessibility. VCT and carpeting is damaged and should be replaced to comply with code for unimpeded means for emergency egress. Door hardware does not comply with code. Damaged sidewalks should be repaired/replaced to comply with code for an unimpeded means for emergency egress. Damaged ceiling tile should be replaced. Interior walls should be repaired/repainted.

ENERGY CODE DEFICIENCIES

In addition to the building code deficiencies listed above, the existing building does not comply with the current energy code. These deficiencies are not included in the estimated costs to correct code deficiencies and are not considered in determining whether the building is substandard.

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Estimate Name:	Duluth Central HS 2022	
Building Type:	School, High, 2-3 Story with E.I.F.S. / Rigid Steel	
Location:	DULUTH, MN	 Costs are derived from a building model with basic components. Scope differences and market conditions can cause costs to vary significantly.
Story Count:	2	
Story Height (L.F.):	15.00	
Floor Area (S.F.):	228826	
Labor Type:	OPN	
Basement Included:	No	
Data Release:	Year 2022 Quarter 2	
Cost Per Square Foot:	\$205.56	
Building Cost:	\$46,168,976.77	

		Quantity	% of Total	Cost Per S.F.	Cost
A	Substructure		4.21%	\$7.53	\$1,722,685.31
A1010	Standard Foundations			\$3.56	\$815,432.56
A10101051560	Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick	3120		\$1.47	\$336,765.00
A10101103100	Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing capacity 6 KSF, 12" deep x 32" wide	3120		\$0.94	\$214,097.52
A10102107700	Spread footings, 3000 PSI concrete, load 200K, soil bearing capacity 6 KSF, 6' - 0" square x 20" deep	212.98		\$1.16	\$264,570.04
A1030	Slab on Grade			\$3.82	\$874,044.38
A10301202240	Slab on grade, 4" thick, non industrial, reinforced	114413		\$3.82	\$874,044.38
A2010	Basement Excavation			\$0.15	\$33,208.37
A20101105740	Excavate and fill, 30,000 SF, 4' deep, sand, gravel, or common earth, on site storage	171619.5		\$0.15	\$33,208.37
B	Shell		28.09%	\$50.21	\$11,488,578.45
B1010	Floor Construction			\$14.21	\$3,250,861.96
B10102049918	Cast-in-place concrete column, 16", square, tied, minimum reinforcing, 300K load, 10'-14' story height, 240 lbs/LF, 4000PSI	3588		\$1.79	\$410,307.53
B10102205100	Cast-in-place concrete beam and slab, 7.5" slab, two way, 12" column, 25'x25' bay, 40 PSF superimposed load, 149 PSF total load	114413		\$12.41	\$2,840,554.43
B1020	Roof Construction			\$4.48	\$1,025,140.48
B10201083000	Roof, steel joists, beams, 1.5" 22 ga metal deck, on columns and bearing wall, 25'x25' bay, 18" deep, 20 PSF superimposed load, 40 PSF total load	114413		\$4.48	\$1,025,140.48
B2010	Exterior Walls			\$13.98	\$3,198,926.25
B20101321201	Brick wall, composite double wythe, standard face/CMU back-up, 8" thick, perlite core fill, 3" XPS	70200		\$13.98	\$3,198,926.25
B2020	Exterior Windows			\$10.96	\$2,507,143.86
B20202102100	Aluminum flush tube frame, thermo-break frame, 2.25" x 4.5", 5'x6' opening, 2 intermediate horizontals	23400		\$5.63	\$1,288,217.97
B20202201100	Glazing panel, insulating, 1/2" thick, 2 lites 1/8" float glass, tinted	23400		\$5.33	\$1,218,925.89
B2030	Exterior Doors			\$0.99	\$227,015.01
B20301106950	Door, aluminum & glass, with transom, narrow stile, double door, hardware, 6'-0" x 10'-0" opening	5.28		\$0.21	\$47,174.37
B20302203450	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	42.24		\$0.74	\$168,694.47
B20302204350	Door, steel 24 gauge, overhead, sectional, manual operation, 8'-0" x 8'-0" opening	3.52		\$0.05	\$11,146.17
B3010	Roof Coverings			\$5.33	\$1,220,073.23
B30101203300	Roofing, single ply membrane, EPDM, 60 mils, fully adhered	114413		\$1.36	\$310,059.23
B30103202700	Insulation, rigid, roof deck, extruded polystyrene, 40 PSI compressive strength, 4" thick, R20	114413		\$2.91	\$666,000.36
B30104101300	Base flashing, aluminum, .016" thick, fabric 2 sides, .025" aluminum reglet, .032" counter flashing	3120		\$0.52	\$120,097.38
B30104201400	Roof edges, aluminum, duranodic, .050" thick, 6" face	3120		\$0.54	\$123,916.26
B3020	Roof Openings			\$0.26	\$59,417.66

B30202100300	Roof hatch, with curb, 1" fiberglass insulation, 2'-6" x 3'-0", galvanized steel, 165 lbs	10		\$0.08	\$18,917.36
B30202102100	Smoke hatch, unlabeled, galvanized, 2'-6" x 3'; not incl hand winch operator	17.6		\$0.18	\$40,500.30
C	Interiors		23.27%	\$41.59	\$9,516,862.45
C1010	Partitions			\$5.08	\$1,162,921.08
C10101045500	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	10983.65		\$0.43	\$99,156.86
C10101049000	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish, foamed in insulation	98852.83		\$4.65	\$1,063,764.22
C1020	Interior Doors			\$2.30	\$526,336.41
C10201022600	Door, single leaf, kd steel frame, hollow metal, commercial quality, flush, 3'-0" x 7'-0" x 1-3/8"	326.89		\$2.30	\$526,336.41
C1030	Fittings			\$6.65	\$1,521,349.74
C10301100400	Toilet partitions, cubicles, ceiling hung, painted metal	228.83		\$0.88	\$201,662.29
C10303100200	Lockers, steel, 1- tier, std. duty, 5' to 6' high, per opening, 1 wide, knock down constr.	5280.6		\$5.35	\$1,224,652.99
C10305200240	Chalkboards, liquid chalk type, aluminum frame & chalktrough	4576.52		\$0.42	\$95,034.46
C2010	Stair Construction			\$1.02	\$233,733.44
C20101100720	Stairs, steel, pan tread for conc in-fill, picket rail, 12 risers w/ landing	17.6		\$1.02	\$233,733.44
C3010	Wall Finishes			\$4.43	\$1,016,036.69
C30102202000	2 coats paint on masonry with block filler	70200		\$2.80	\$641,086.32
C30102202000	2 coats paint on masonry with block filler	197705.66		\$0.99	\$227,632.63
C30102301940	Ceramic tile, thin set, 4-1/4" x 4-1/4"	21967.3		\$0.64	\$147,317.74
C3020	Floor Finishes			\$8.06	\$1,844,878.51
C30204100160	Carpet, tufted, nylon, roll goods, 12' wide, 36 oz	22882.6		\$0.62	\$142,721.75
C30204100220	Carpet, padding, add to above, 2.7 density	22882.6		\$0.12	\$28,230.95
C30204101120	Terrazzo, maximum	22882.6		\$3.06	\$699,997.04
C30204101600	Vinyl, composition tile, maximum	137295.6		\$1.48	\$338,069.82
C30204102160	Oak strip, sanded and finished, minimum	45765.2		\$2.10	\$481,190.42
C30204102340	Underlayment, plywood, 3/8" thick	45765.2		\$0.68	\$154,668.53
C3030	Ceiling Finishes			\$10.24	\$2,342,887.63
C30302106000	Acoustic ceilings, 3/4" fiberglass board, 24" x 48" tile, tee grid, suspended support	228826		\$10.24	\$2,342,887.63
D	Services		30.68%	\$54.84	\$12,547,978.01
D1010	Elevators and Lifts			\$0.82	\$187,881.11
D10101108600	Hydraulic passenger elevator, 2500 lb., 2 floor, 125 FPM	1.76		\$0.82	\$187,881.11
D2010	Plumbing Fixtures			\$7.49	\$1,713,731.72
D20101102120	Water closet, vitreous china, bowl only with flush valve, floor mount	228.83		\$1.71	\$391,953.77
D20102102000	Urinal, vitreous china, wall hung	75.69		\$0.48	\$109,298.50
D20103102120	Lavatory w/trim, wall hung, PE on CI, 20" x 18"	228.83		\$2.14	\$489,740.27
D20104102040	Kitchen sink w/trim, countertop, stainless steel, 44" x 22" triple bowl	15.84		\$0.20	\$45,646.01
D20104301840	Lab sink w/trim, polyethylene, single bowl, flanged, 23-1/2" x 20-1/2" OD	21.12		\$0.16	\$37,423.93
D20104404260	Service sink w/trim, PE on CI, corner floor, 28" x 28", w/rim guard	10.56		\$0.24	\$55,790.91
D20107101680	Shower, stall, baked enamel, terrazzo receptor, 36" square	75.69		\$1.23	\$280,992.79
D20108201920	Water cooler, electric, wall hung, wheelchair type, 7.5 GPH	114.41		\$1.32	\$302,885.54
D2020	Domestic Water Distribution			\$0.89	\$203,707.00
D20202502260	Gas fired water heater, commercial, 100 < F rise, 600 MBH input, 576 GPH	5		\$0.89	\$203,707.00
D2040	Rain Water Drainage			\$0.50	\$114,279.93
D20402104280	Roof drain, CI, soil, single hub, 5" diam, 10' high	35.2		\$0.45	\$103,781.57
D20402104320	Roof drain, CI, soil, single hub, 5" diam, for each additional foot add	176.02		\$0.05	\$10,498.36
D3010	Energy Supply			\$5.45	\$1,247,925.25
D30105202040	Commercial building heating system, fin tube radiation, forced hot water, 100,000 SF, 1mil CF, total 3 floors	263149.9		\$5.45	\$1,247,925.25
D3030	Cooling Generating Systems			\$17.98	\$4,114,874.99

D30301154600	Packaged chiller, water cooled, with fan coil unit, schools and colleges, 60,000 SF, 230.00 ton	263149.9		\$17.98	\$4,114,874.99
D4010	Sprinklers			\$2.62	\$598,863.96
D40104100640	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 50,000 SF	114413		\$1.51	\$345,584.47
D40104100760	Wet pipe sprinkler systems, steel, light hazard, each additional floor, 50,000 SF	114413		\$1.11	\$253,279.49
D4020	Standpipes			\$0.46	\$104,489.08
D40203101580	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, 1 floor	3.52		\$0.30	\$69,125.61
D40203101600	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, additional floors	7.04		\$0.15	\$35,363.47
D5010	Electrical Service/Distribution			\$0.85	\$194,224.05
D50101200560	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 2000 A	1.25		\$0.28	\$63,900.00
D50102300560	Feeder installation 600 V, including RGS conduit and XHHW wire, 2000 A	100		\$0.28	\$63,580.50
D50102400400	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 2000 A	1.2		\$0.29	\$66,743.55
D5020	Lighting and Branch Wiring			\$12.73	\$2,912,828.40
D50201100480	Receptacles incl plate, box, conduit, wire, 8 per 1000 SF, .9 W per SF, with transformer	228826		\$3.81	\$872,932.29
D50201300280	Wall switches, 2.0 per 1000 SF	228826		\$0.51	\$116,975.85
D50201350320	Miscellaneous power, 1.2 watts	228826		\$0.39	\$90,168.89
D50201400280	Central air conditioning power, 4 watts	228826		\$0.75	\$172,051.98
D50201452080	Motor installation, three phase, 460 V, 15 HP motor size	1		\$0.01	\$2,740.25
D50201550440	Motor feeder systems, three phase, feed to 200 V 5 HP, 230 V 7.5 HP, 460 V 15 HP, 575 V 20 HP	100		\$0.01	\$1,288.65
D50202100520	Fluorescent fixtures recess mounted in ceiling, 1.6 watt per SF, 40 FC, 10 fixtures @32watt per 1000 SF	228826		\$7.24	\$1,656,670.49
D5030	Communications and Security			\$4.49	\$1,027,277.05
D50309100280	Communication and alarm systems, includes outlets, boxes, conduit and wire, sound systems, 100 outlets	1.6		\$1.07	\$243,772.80
D50309100456	Communication and alarm systems, fire detection, addressable, 100 detectors, includes outlets, boxes, conduit and wire	2.64		\$1.04	\$237,663.44
D50309100462	Fire alarm command center, addressable with voice, excl. wire & conduit	1.76		\$0.13	\$29,778.23
D50309100840	Communication and alarm systems, includes outlets, boxes, conduit and wire, master clock systems, 50 rooms	1.25		\$0.63	\$143,771.94
D50309101040	Communication and alarm systems, includes outlets, boxes, conduit and wire, master TV antenna systems, 100 outlets	2.31		\$1.63	\$372,290.64
D50309200102	Internet wiring, 2 data/voice outlets per 1000 S.F.	1		\$0.00	\$0.00
D5090	Other Electrical Systems			\$0.56	\$127,895.47
D50902100880	Generator sets, w/battery, charger, muffler and transfer switch, diesel engine with fuel tank, 250 kW	440.05		\$0.56	\$127,895.47
E	Equipment & Furnishings		13.76%	\$24.59	\$5,626,239.88
E1020	Institutional Equipment			\$20.56	\$4,705,725.14
E10207200100	Architectural equipment, laboratory equipment, counter tops, acid proof, economy	22882.6		\$13.88	\$3,177,152.90
E10207300110	Architectural equipment, laboratory equipment, cabinets, wall, open	624		\$0.68	\$155,861.47
E10207300120	Architectural equipment, laboratory equipment, cabinets, base, drawer units	624		\$6.00	\$1,372,710.77
E1090	Other Equipment			\$4.02	\$920,514.74
E10906100120	Architectural equipment, school equipment basketball backstops, suspended type, electrically operated	7.04		\$0.32	\$72,389.63
E10906100130	Architectural equipment, school equipment bleachers-telescoping, manual operation, 15 tier, economy (per seat)	5280.6		\$3.61	\$825,215.20
E10906100150	Architectural equipment, school equipment, weight lifting gym, universal, economy	7.04		\$0.04	\$8,894.92
E10906100170	Architectural equipment, school equipment, scoreboards, basketball, 1 side, economy	3.52		\$0.06	\$14,014.99
F	Special Construction		0.00%	\$0.00	\$0.00
G	Building Sitework		0.00%	\$0.00	\$0.00

SubTotal	100%	\$178.75	\$40,033,625.15
Contractor Fees (General Conditions,Overhead,Profit)	15.0%	\$26.81	\$6,135,351.62
Architectural Fees	0.0%	\$0.00	\$0.00
User Fees	0.0%	\$0.00	\$0.00
Total Building Cost		\$205.56	\$46,168,976.77

CENTRAL HIGH SCHOOL REDEVELOPMENT TIF DISTRICT

Code Deficiency Cost Report

Parcel A - 800 East Central Entrance, Duluth, Minnesota 55811

Parcel ID 010-2710-06120 Plus Multiple Others

Building Name or Type

Former Duluth Central High School

Code	Related Cost Items	Unit Cost	Units	Unit Quantity	Total
Accessibility Items					
	Restrooms				
	Modify restrooms to comply with accessibility code	\$ 5.21	SF	228,826	\$ 1,192,183.46
	Lockeroom Showers				
	Modify locker room showers to comply with accessibility code	\$ 1.23	SF	228,826	\$ 281,455.98
	Water Fountains				
	Install code compliant water fountains	\$ 1.32	SF	228,826	\$ 302,050.32
	Auditorium				
	Install code compliant accessible seating in the auditorium	\$ 15,000.00	Lump	1	\$ 15,000.00
	Provide code required assistive listening devices in auditorium	\$ 5,000.00	Lump	1	\$ 5,000.00
	Music Mezzanine				
	Provide code required access to music mezzanine	\$ 25,000.00	Lump	1	\$ 25,000.00
	Accessible Route				
	Provide a code required accessible route to all levels of the building	\$ 0.82	SF	228,826	\$ 187,637.32
Structural Elements					
	Steel Supports				
	Protect steel supports around cafeteria exterior from rusting per code	\$ 2,500.00	Lump	1	\$ 2,500.00
	Steel Lintels				
	Protect steel lintels from rusting per code	\$ 1,000.00	Lump	1	\$ 1,000.00
	Exterior Masonry				
	Repair/replace damaged exterior masonry to prevent water intrusion per code	\$ 1.00	SF	228,826	\$ 228,826.00
Exiting					
	Emergency Lighting				
	Install a code compliant emergency lighting system	\$ 0.75	SF	228,826	\$ 171,619.50
	Emergency Notification System				
	Install a code compliant emergency notification system	\$ 0.13	SF	228,826	\$ 29,747.38
	Cafeteria				
	Modify cafeteria exiting to comply with code	\$ 15,000.00	Lump	1	\$ 15,000.00
	Science Rooms				
	Install code required secondary egress in all science lab rooms	\$ 100,000.00	Lump	1	\$ 100,000.00
	Door Hardware				
	Install code compliant door hardware	\$ 0.23	SF	228,826	\$ 52,629.98
	Guard Rails				
	Modify guard rails to comply with code	\$ 2,500.00	Lump	1	\$ 2,500.00
	Concrete Sidewalks				
	Repair/replace damaged sidewalks to create a code required unimpeded means of emergency egress	\$ 5.00	SF	50,000	\$ 250,000.00

Code	Related Cost Items	Unit Cost	Units	Unit Quantity	Total
	Exterior Exit Landings				
	Modify exterior exit landings to comply with code	\$ 15,000.00	Lump	1	\$ 15,000.00
	Interior Stairs				
	Modify interior stair railings to comply with code	\$ 1.02	SF	228,826	\$ 233,402.52
	Exterior Stairs				
	Modify exterior loading dock and small gym stairs to comply with code for proper tread size	\$ 35,000.00	Lump	1	\$ 35,000.00
	Flooring Material				
	Repair/replace damaged flooring material to create a code required unimpeded means of emergency egress	\$ 0.62	SF	228,826	\$ 141,872.12
Fire Protection					
	Smoke Detectors				
	Install code required smoke detectors	\$ 1.04	SF	228,826	\$ 237,979.04
	Fire Caulking				
	Install code required fire caulking	\$ 0.05	SF	228,826	\$ 11,441.30
	Asbestos Containing Building Material				
	Repair/Protect ACBM from damage per code	\$ 0.20	SF	228,826	\$ 45,765.20
	Building Sprinkler System				
	Modify building sprinkler system to comply with code	\$ 1.11	SF	228,826	\$ 253,996.86
Exterior Construction					
	Windows				
	Replace failed window system to prevent water intrusion per code	\$ 10.96	SF	228,826	\$ 2,507,932.96
	Expansion Joint Caulking				
	code	\$ 0.10	SF	228,826	\$ 22,882.60
Roof Construction					
	Roofing Material				
	Replace failed roofing material to prevent water intrusion per code	\$ 6.09	SF	228,826	\$ 1,393,550.34
Mechanical- Electrical					
	Mechanical				
	Install code compliant HVAC system	\$ 23.43	SF	228,826	\$ 5,361,393.18
	machine	\$ 18,000.00	EA	1	\$ 18,000.00
	Install code compliant exhaust system in kitchen	\$ 38,000.00	EA	1	\$ 38,000.00
	Electrical				
	Install code compliant electrical wiring system	\$ 5.49	SF	228,826	\$ 1,256,254.74
	Install code compliant lighting system	\$ 7.24	SF	228,826	\$ 1,656,700.24
Total Code Improvements					\$ 16,091,321

Energy Code

Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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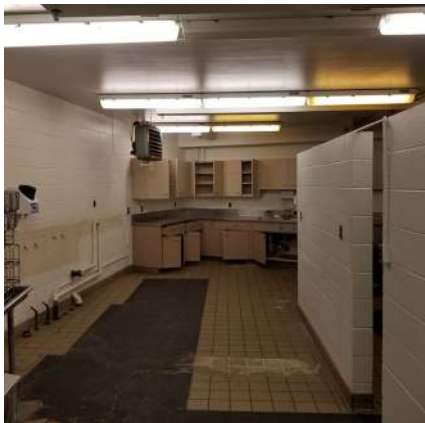
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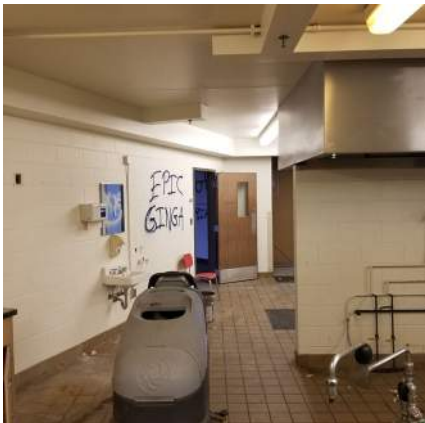
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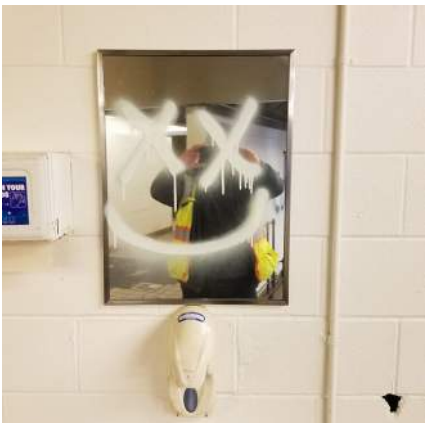
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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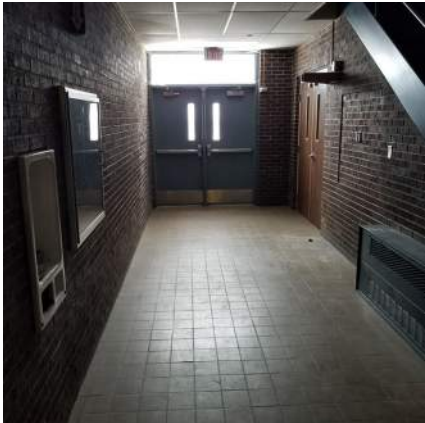


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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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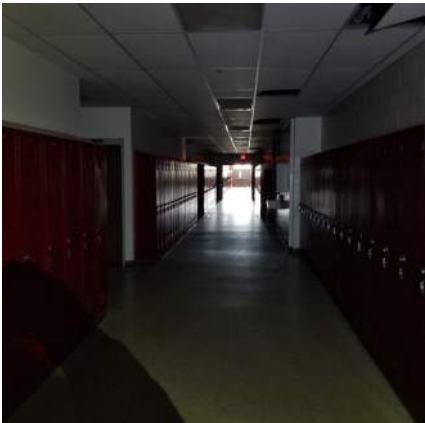
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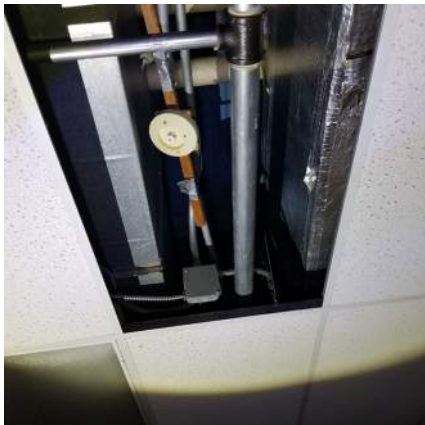


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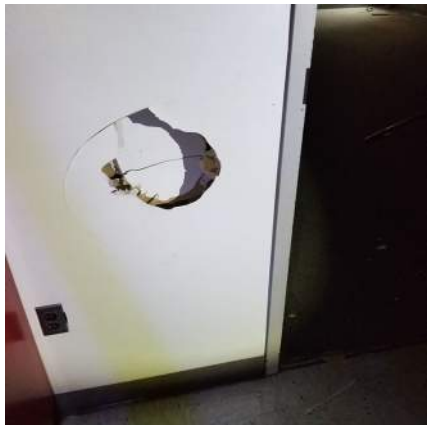
Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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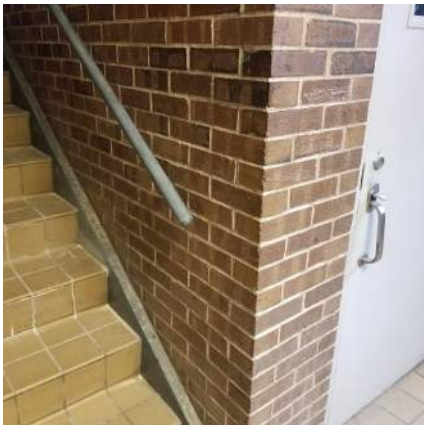
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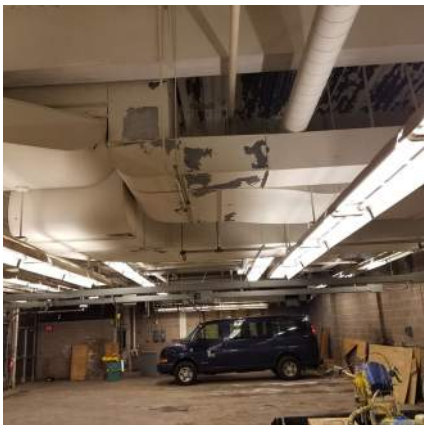
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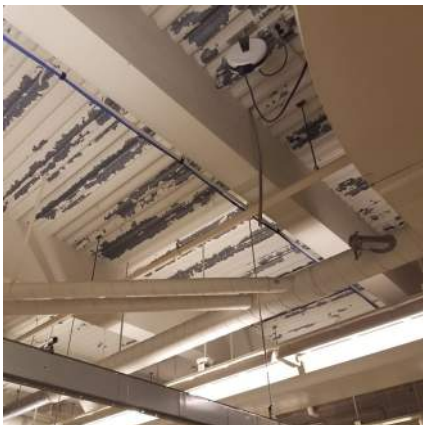
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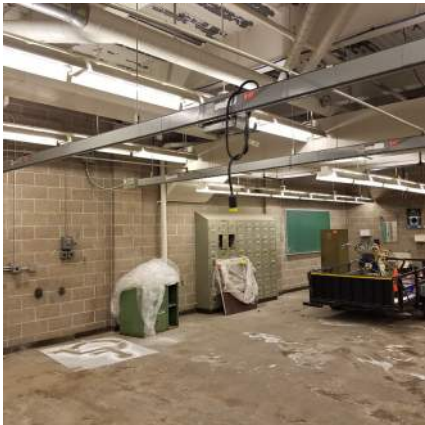
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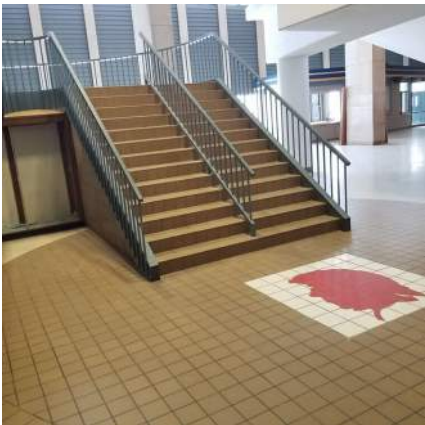
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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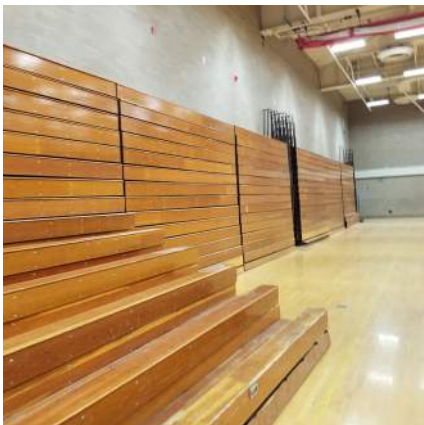
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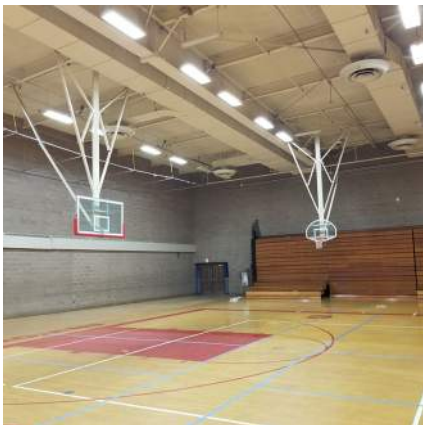
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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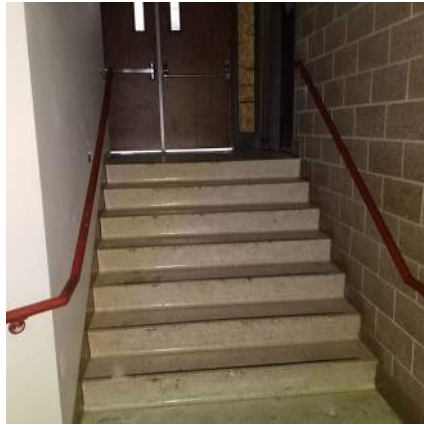


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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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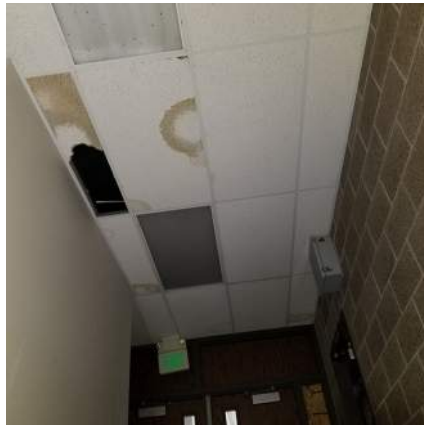
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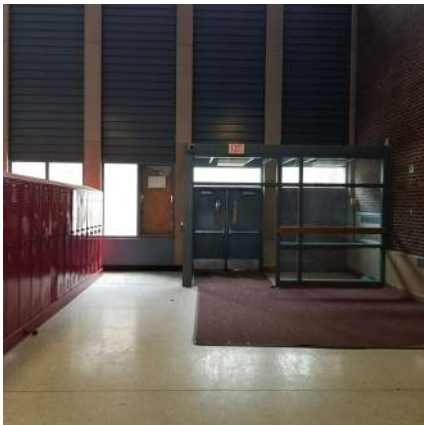
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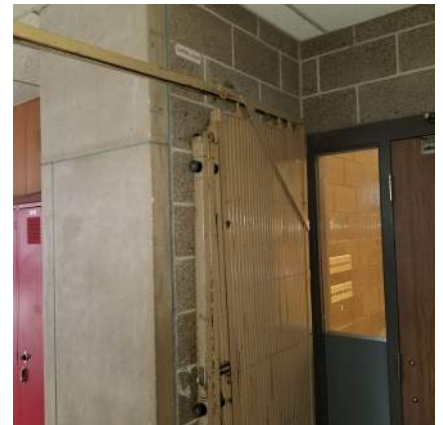
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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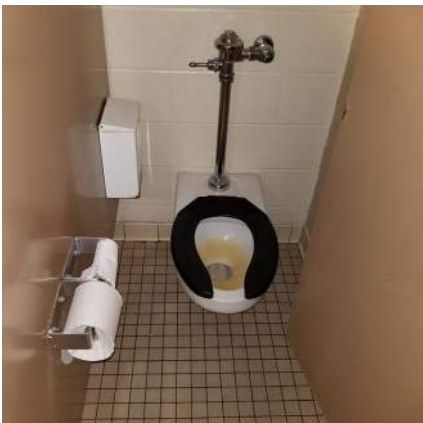
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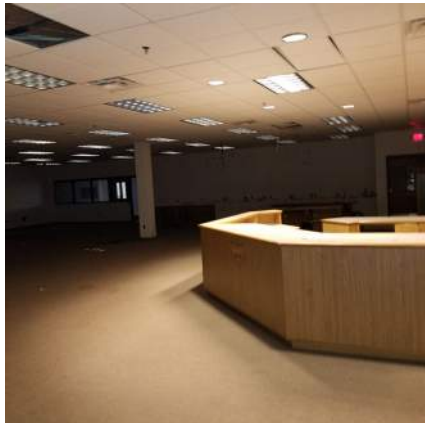
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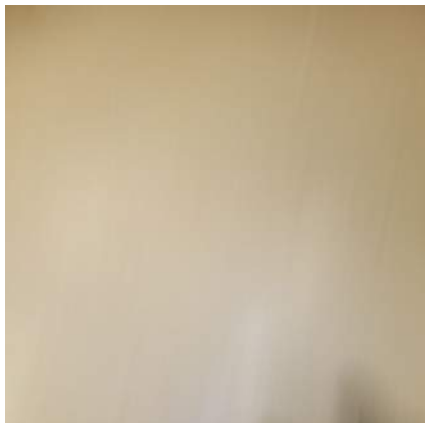
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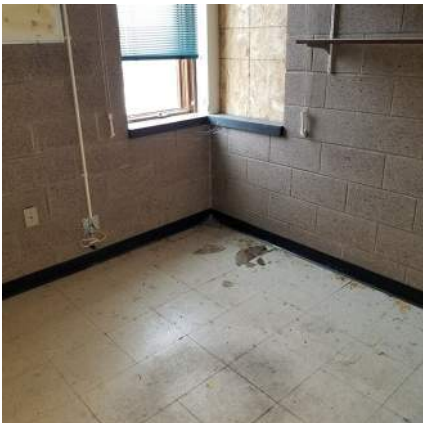
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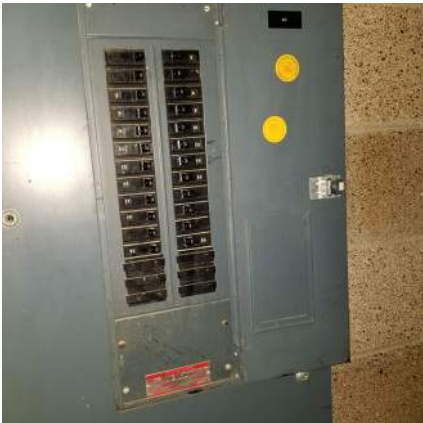
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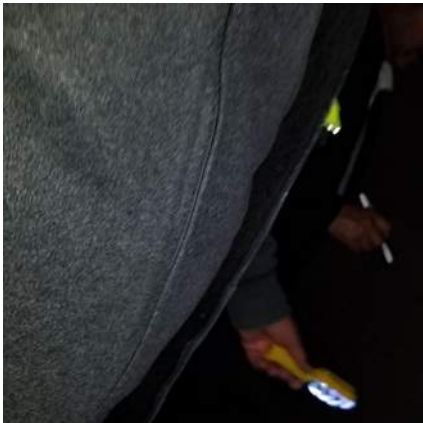
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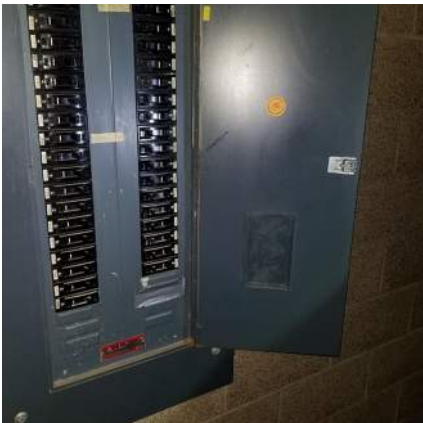
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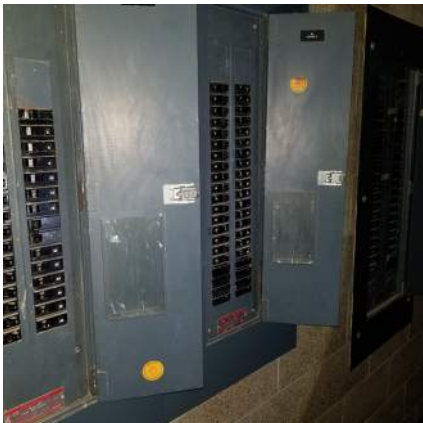
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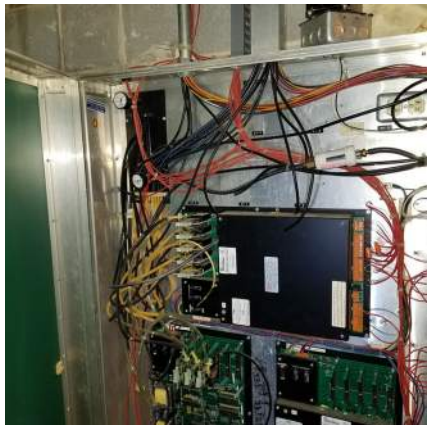
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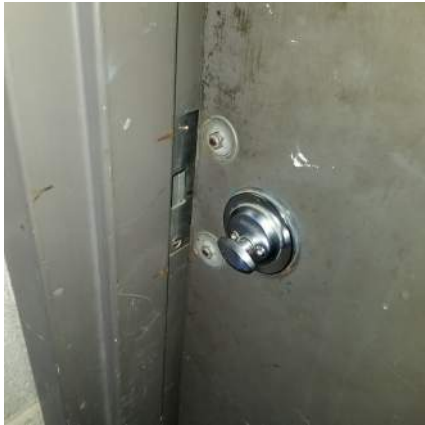
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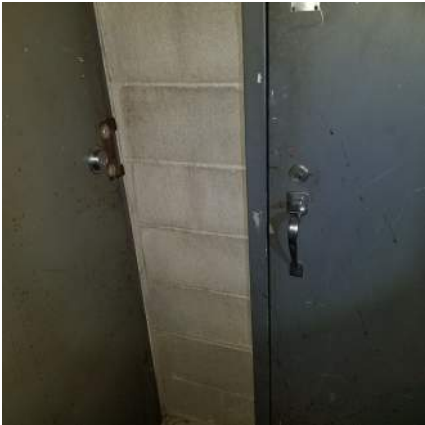
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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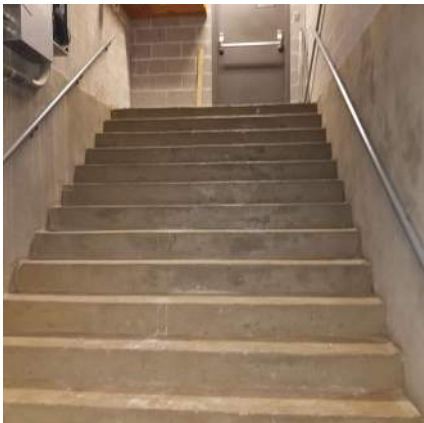
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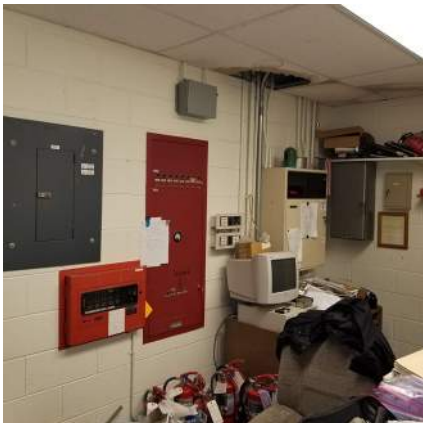
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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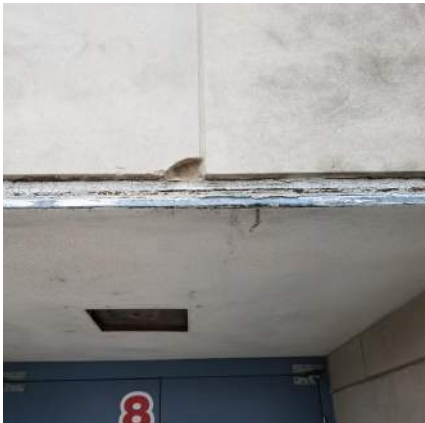
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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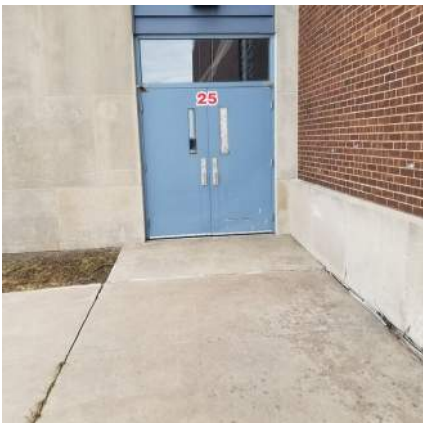
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Central High School Redevelopment TIF District | 800 E Central Entrance - Parcel A



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Central High School Redevelopment TIF District

Building Code, Condition Deficiency and Context Analysis Report

Parcel B

Secondary Technical Center Main Campus

Address:	802 East Central Entrance, Duluth, Minnesota 55811
Parcel ID:	010-2710-06203
Inspection Date(s) & Time(s):	April 22, 2022, 11:30 am
Inspection Type:	Interior and Exterior
Summary of Deficiencies:	It is our professional opinion that this building is Substandard because: - Substantial renovation is required to correct Conditions found. - Building Code deficiencies total more than 15% of replacement cost, NOT including energy code deficiencies.

Estimated Replacement Cost:	\$10,094,151
Estimated Cost to Correct Building Code Deficiencies:	\$2,585,060
Percentage of Replacement Cost for Building Code Deficiencies:	25.6%

DEFECTS IN STRUCTURAL ELEMENTS

1. Steel support beams should be protected from rusting per code.
2. Steel lintels should be protected from rusting per code.

COMBINATION OF DEFICIENCIES

1. Essential Utilities and Facilities
 - a. The elevator does not comply with code.
 - b. Restrooms are not fully code compliant for accessibility.
2. Light and Ventilation
 - a. The lighting system does not fully comply with code.
 - b. The HVAC system does not comply with code.
 - c. Electrical wiring system does not comply with code.
3. Fire Protection/Adequate Egress
 - a. Thresholds do not comply with code for maximum height.
 - b. Through wall, floor, and ceiling penetrations should be fire caulked per code.
 - c. Green houses do not have code required secondary exits.
 - d. Lecture hall does not have a code required secondary exit.
 - e. Emergency notification system does not comply with code.
 - f. Emergency lighting system does not comply with code.

4. Layout and Condition of Interior Partitions/Materials
 - a. Interior walls should be repaired/repainted.
 - b. Basement block walls show signs of efflorescence, indicative of water infiltration which is contrary to code.
 - c. Windows are failing allowing for water intrusion which is contrary to code.
5. Exterior Construction
 - a. Exterior hollow metal door frames are rusting and should be repaired/repainted.
 - b. Roofing material is failing allowing for water intrusion which is contrary to code.
 - c. The Exterior Insulation and Finish System, (EIFS), is damaged and joints are failing, allowing for water intrusion which is contrary to code.
 - d. Expansion joint caulking is failing allowing for water intrusion which is contrary to code.
 - e. Exterior walls should be repaired/repainted.

DESCRIPTION OF CODE DEFICIENCIES

1. Protect steel support beams from rusting per code.
2. Protect steel lintels from rusting per code.
3. Modify elevator to comply with code.
4. Modify restrooms to comply with code.
5. Install code compliant lighting system.
6. Install code compliant HVAC systems.
7. Install code compliant electrical wiring system.
8. Modify thresholds to comply with code.
9. Install code required fire caulking at all through wall, floor, and ceiling penetrations.
10. Install code required secondary exits in greenhouses.
11. Install code required secondary exit from lecture hall.
12. Install code compliant emergency notification system.
13. Install code compliant emergency lighting system.
14. Protect below grade level block walls from water intrusion per code.
15. Replace failing windows to prevent water intrusion per code.
16. Replace failed roofing material to prevent water intrusion per code.
17. Repair damaged EIFS to prevent water intrusion per code.
18. Replace failed expansion joint caulking to prevent water intrusion per code.

OVERVIEW OF DEFICIENCIES

The secondary technical school has been vacant for several years. Roofing and window systems are failing allowing for water intrusion which is contrary to code. Interior walls should be repaired/repainted. The elevator and restrooms do not fully comply with accessibility code. The greenhouses and lecture hall do not have code required secondary emergency exits. The emergency notification system does not comply with code. The emergency lighting system does not comply with code. Steel support beams and steel lintels should be protected from rusting per code. Damaged exterior walls and failed caulking should be repaired/replaced to prevent water intrusion per code.

ENERGY CODE DEFICIENCIES

In addition to the building code deficiencies listed above, the existing building does not comply with the current energy code. These deficiencies are not included in the estimated costs to correct code deficiencies and are not considered in determining whether the building is substandard:

M:\14Proj\140705\400 Design\406 Reports\140705-01 TIF Report 2022\Building Reports\B - Secondary Tech Center Main Campus Building Report .docx

Estimate Name:	Secondary Technical Center Main Campus		
Building Type:	School, Vocational with Decorative Concrete Block / Rigid Steel		
Location:	DULUTH, MN	 Costs are derived from a building model with basic components. Scope differences and market conditions can cause costs to vary significantly.	
Story Count:	3		
Story Height (L.F.):	16.00		
Floor Area (S.F.):	52775		
Labor Type:	STD		
Basement Included:	No		
Data Release:	Year 2022 Quarter 1		
Cost Per Square Foot:	\$191.27		
Building Cost:	\$10,094,151.02		

		Quantity	% of Total	Cost Per S.F.	Cost
A	Substructure		6.50%	\$10.82	\$570,900.05
A1010	Standard Foundations			\$3.58	\$189,155.78
A10101051560	Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick	600		\$1.50	\$79,245.90
A10101102500	Strip footing, concrete, reinforced, load 5.1 KLF, soil bearing capacity 3 KSF, 12" deep x 24" wide	660		\$0.86	\$45,292.17
A10102107550	Spread footings, 3000 PSI concrete, load 150K, soil bearing capacity 3 KSF, 7' - 6" square x 18" deep	32.98		\$1.22	\$64,617.71
A1030	Slab on Grade			\$7.16	\$377,758.17
A10301203440	Slab on grade, 5" thick, heavy industrial, reinforced	17591.67		\$7.16	\$377,758.17
A2010	Basement Excavation			\$0.08	\$3,986.10
A20101105740	Excavate and fill, 30,000 SF, 4' deep, sand, gravel, or common earth, on site storage	17591.67		\$0.08	\$3,986.10
B	Shell		36.12%	\$60.07	\$3,170,309.92
B1010	Floor Construction			\$29.63	\$1,563,883.59
B10102506150	Floor, concrete, slab form, open web bar joist @ 2' OC, on W beam and column, 25'x30' bay, 29" deep, 100 PSF superimposed load, 145 PSF total load	35183.33		\$25.86	\$1,364,671.78
B10102506200	Floor, concrete, slab form, open web bar joist @ 2' OC, on W beam and column, 25'x30' bay, 29" deep, 100 PSF superimposed load, 145 PSF total load, for columns add	35183.33		\$1.94	\$102,206.18
B10107203650	Fireproofing, gypsum board, fire rated, 2 layer, 1" thick, 10" steel column, 3 hour rating, 17 PLF	1773.24		\$1.84	\$97,005.63
B1020	Roof Construction			\$6.67	\$352,160.72
B10201123900	Roof, steel joists, beams, 1.5" 22 ga metal deck, on columns, 25'x30' bay, 25" deep, 40 PSF superimposed load, 60 PSF total load	17591.67		\$5.59	\$294,776.35
B10201124000	Roof, steel joists, beams, 1.5" 22 ga metal deck, on columns, 25'x30' bay, 25" deep, 40 PSF superimposed load, 60 PSF total load, add for column	17591.67		\$1.09	\$57,384.37
B2010	Exterior Walls			\$11.50	\$606,846.96
B20101155440	Concrete block (CMU) wall, split rib, 8 ribs, hollow, regular weight, 8x8x16, reinforced, vertical #5@32", grouted	24480		\$11.50	\$606,846.96
B2020	Exterior Windows			\$7.51	\$396,262.80
B20202101700	Aluminum flush tube frame, for insulating glass, 2" x 4-1/2", 5'x6' opening, no intermediate horizontals	4320		\$3.03	\$159,790.32
B2020201100	Glazing panel, insulating, 1/2" thick, 2 lites 1/8" float glass, tinted	4320		\$4.48	\$236,472.48
B2030	Exterior Doors			\$0.95	\$50,266.29
B20301106450	Door, aluminum & glass, without transom, wide stile, double door, hardware, 6'-0" x 7'-0" opening	1.32		\$0.25	\$13,313.62
B20302203450	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	3.96		\$0.30	\$16,019.44
B20302204400	Door, steel 24 gauge, overhead, sectional, manual operation, 10'-0" x 10'-0" opening	1.32		\$0.07	\$3,760.31
B20302204600	Door, steel 24 gauge, overhead, sectional, electric operator, 10'-0" x 10'-0" opening	3.96		\$0.33	\$17,172.92
B3010	Roof Coverings			\$3.49	\$184,252.17

B30101203300	Roofing, single ply membrane, EPDM, 60 mils, fully adhered	17591.67		\$0.95	\$50,374.09
B30103201600	Insulation, rigid, roof deck, polyisocyanurate, 2#/CF, 2" thick	35183.33		\$1.93	\$101,783.98
B30104201400	Roof edges, aluminum, duranodic, .050" thick, 6" face	600		\$0.47	\$24,543.84
B30104300040	Flashing, aluminum, no backing sides, .019"	600		\$0.14	\$7,550.26
B3020	Roof Openings			\$0.32	\$16,637.39
B30202100300	Roof hatch, with curb, 1" fiberglass insulation, 2'-6" x 3'-0", galvanized steel, 165 lbs	2.64		\$0.09	\$4,843.65
B30202102100	Smoke hatch, unlabeled, galvanized, 2'-6" x 3', not incl hand winch operator	5.28		\$0.22	\$11,793.74
C	Interiors		17.16%	\$28.54	\$1,506,309.82
C1010	Partitions			\$6.69	\$353,219.91
C10101045500	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	31665		\$6.69	\$353,219.91
C1020	Interior Doors			\$2.86	\$151,147.60
C10201022600	Door, single leaf, kd steel frame, hollow metal, commercial quality, flush, 3'-0" x 7'-0" x 1-3/8"	87.96		\$2.86	\$151,147.60
C1030	Fittings			\$0.49	\$25,895.37
C10301100400	Toilet partitions, cubicles, ceiling hung, painted metal	26.39		\$0.49	\$25,895.37
C2010	Stair Construction			\$2.64	\$139,377.46
C20101100740	Stairs, steel, pan tread for conc in-fill, picket rail,16 risers w/ landing	7.92		\$2.64	\$139,377.46
C3010	Wall Finishes			\$6.75	\$356,089.25
C30102202000	2 coats paint on masonry with block filler	24480		\$1.86	\$98,245.58
C30102300320	Painting, masonry or concrete, latex, brushwork, primer & 2 coats	31665		\$1.31	\$69,039.20
C30102300340	Painting, masonry or concrete, latex, brushwork, addition for block filler	31665		\$1.10	\$58,041.95
C30102300860	Wall coatings, acrylic glazed coatings, maximum	25332		\$1.48	\$78,356.94
C30102301940	Ceramic tile, thin set, 4-1/4" x 4-1/4"	6333		\$0.99	\$52,405.58
C3020	Floor Finishes			\$3.29	\$173,550.06
C30204100160	Carpet, tufted, nylon, roll goods, 12' wide, 36 oz	10555		\$1.33	\$69,966.98
C30204101600	Vinyl, composition tile, maximum	36942.5		\$1.96	\$103,583.08
C3030	Ceiling Finishes			\$5.82	\$307,030.17
C30302107400	Acoustic ceilings, 3/4" mineral fiber, 12" x 12" tile, concealed 2" bar & channel grid, suspended support	31665		\$5.82	\$307,030.17
D	Services		40.22%	\$66.89	\$3,530,002.84
D1010	Elevators and Lifts			\$2.93	\$154,435.48
D10101108600	Hydraulic passenger elevator, 2500 lb., 2 floor, 125 FPM	1.32		\$2.93	\$154,435.48
D2010	Plumbing Fixtures			\$6.73	\$355,395.62
D20101102120	Water closet, vitreous china, bowl only with flush valve, floor mount	34.83		\$1.27	\$67,190.14
D20102102000	Urinal, vitreous china, wall hung	17.42		\$0.56	\$29,353.03
D20103102120	Lavatory w/trim, wall hung, PE on CI, 20" x 18"	34.83		\$1.55	\$81,544.72
D20104102040	Kitchen sink w/trim, countertop, stainless steel, 44" x 22" triple bowl	2.23		\$0.13	\$6,869.73
D20104404340	Service sink w/trim, PE on CI,wall hung w/rim guard, 24" x 20"	4.47		\$0.55	\$29,065.72
D20107101680	Shower, stall, baked enamel, terrazzo receptor, 36" square	13.06		\$0.96	\$50,449.29
D20108201880	Water cooler, electric, wall hung, dual height, 14.3 GPH	17.42		\$1.43	\$75,389.82
D20109222240	Bathroom, lavatory & water closet, 1 wall plumbing, share common plumbing wall*	3.96		\$0.29	\$15,533.17
D2020	Domestic Water Distribution			\$1.04	\$54,811.90
D20202502220	Gas fired water heater, commercial, 100 < F rise, 500 MBH input, 480 GPH	1.69		\$1.04	\$54,811.90
D2040	Rain Water Drainage			\$1.08	\$56,838.57
D20402104200	Roof drain, CI, soil,single hub, 4" diam, 10' high	9.9		\$0.54	\$28,388.50
D20402104240	Roof drain, CI, soil,single hub, 4" diam, for each additional foot add	456		\$0.54	\$28,450.07
D3010	Energy Supply			\$11.91	\$628,314.66
D30105202000	Commercial building heating system, fin tube radiation, forced hot water, 10,000 SF, 100,000 CF, total 2 floors	31665		\$7.54	\$397,782.06
D30105301920	Commercial building heating systems, terminal unit heaters, forced hot water, 10,000 SF bldg,100,000 CF, total, 2 floors	21110		\$4.37	\$230,532.60

D3030	Cooling Generating Systems			\$17.12	\$903,502.72
D30301154560	Packaged chiller, water cooled, with fan coil unit, schools and colleges, 40,000 SF, 153.33 ton	52775		\$17.12	\$903,502.72
D4010	Sprinklers			\$3.78	\$199,291.33
D40104100620	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 10,000 SF	26387.5		\$2.14	\$113,125.59
D40104100740	Wet pipe sprinkler systems, steel, light hazard, each additional floor, 10,000 SF	26387.5		\$1.63	\$86,165.74
D4020	Standpipes			\$1.59	\$84,089.05
D40203101580	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, 1 floor	2.64		\$1.05	\$55,486.45
D40203101600	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, additional floors	5.28		\$0.54	\$28,602.60
D5010	Electrical Service/Distribution			\$1.67	\$87,882.67
D50101200400	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 800 A	1.65		\$0.62	\$32,932.10
D50102300400	Feeder installation 600 V, including RGS conduit and XHHW wire, 800 A	79.16		\$0.38	\$20,241.77
D50102400280	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 800 A	1.58		\$0.66	\$34,708.80
D5020	Lighting and Branch Wiring			\$15.24	\$804,032.74
D50201100480	Receptacles incl plate, box, conduit, wire, 8 per 1000 SF, .9 W per SF, with transformer	52775		\$4.31	\$227,467.11
D50201300280	Wall switches, 2.0 per 1000 SF	52775		\$0.60	\$31,522.51
D50201350440	Miscellaneous power, 2 watts	52775		\$0.73	\$38,466.64
D50201400280	Central air conditioning power, 4 watts	52775		\$0.83	\$43,718.28
D50202100520	Fluorescent fixtures recess mounted in ceiling, 1.6 watt per SF, 40 FC, 10 fixtures @32watt per 1000 SF	59108		\$8.77	\$462,858.20
D5030	Communications and Security			\$3.70	\$195,136.72
D50309100220	Communication and alarm systems, includes outlets, boxes, conduit and wire, sound systems, 12 outlets	0.73		\$0.40	\$21,102.88
D50309100454	Communication and alarm systems, fire detection, addressable, 50 detectors, includes outlets, boxes, conduit and wire	1.32		\$1.27	\$67,228.75
D50309100462	Fire alarm command center, addressable with voice, excl. wire & conduit	1.32		\$0.39	\$20,427.09
D50309100720	Communication and alarm systems, includes outlets, boxes, conduit and wire, master clock systems, 10 rooms	0.79		\$0.45	\$23,956.20
D50309101000	Communication and alarm systems, includes outlets, boxes, conduit and wire, master TV antenna systems, 30 outlets	1.21		\$1.18	\$62,421.80
D50309200102	Internet wiring, 2 data/voice outlets per 1000 S.F.	1		\$0.00	\$0.00
D5090	Other Electrical Systems			\$0.12	\$6,271.38
D50902100240	Generator sets, w/battery, charger, muffler and transfer switch, gas/gasoline operated, 3 phase, 4 wire, 277/480 V, 11.5 kW	4.62		\$0.12	\$6,271.38
E	Equipment & Furnishings		0.00%	\$0.00	\$0.00
E1090	Other Equipment			\$0.00	\$0.00
F	Special Construction		0.00%	\$0.00	\$0.00
G	Building Sitework		0.00%	\$0.00	\$0.00
SubTotal			100%	\$166.32	\$8,777,522.63
Contractor Fees (General Conditions,Overhead,Profit)			15.0%	\$24.95	\$1,316,628.39
Architectural Fees			0.0%	\$0.00	\$0.00
User Fees			0.0%	\$0.00	\$0.00
Total Building Cost				\$191.27	\$10,094,151.02

CENTRAL HIGH SCHOOL REDEVELOPMENT TIF DISTRICT

Code Deficiency Cost Report

Parcel B - 802 East Central Entrance, Duluth, Minnesota 55811

Parcel ID 010-2710-06203

Building Name or Type

Secondary Technical Center Main Campus

Code	Related Cost Items	Unit Cost	Units	Unit Quantity	Total
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Accessibility Items

Elevator

Modify elevator to comply with code

\$ 0.50 SF 52,775 \$ 26,387.50

Restrooms

Modify restrooms to comply with code

\$ 0.25 SF 52,775 \$ 13,193.75

Structural Elements

Steel Beams

Protect steel beams from rusting per code

\$ 2,500.00 Lump 1 \$ 2,500.00

Steel Lintels

Protect steel lintels from rusting per code

\$ 500.00 Lump 1 \$ 500.00

Exiting

Thresholds

Modify thresholds to comply with code for maximum height

\$ 1,000.00 Lump 1 \$ 1,000.00

Green Houses

Install code required secondary egress from green houses

\$ 2,500.00 EA 3 \$ 7,500.00

Lecture Hall

Install code required secondary egress in lecture hall

\$ 5,000.00 EA 1 \$ 5,000.00

Emergency Notification System

Install a code compliant emergency notification system

\$ 0.39 SF 52,775 \$ 20,582.25

Emergency Lighting System

Install a code compliant emergency lighting system

\$ 0.59 SF 52,775 \$ 31,137.25

Fire Protection

Fire Caulking

Install code required fire caulking

\$ 0.02 SF 52,775 \$ 1,055.50

Exterior Construction

Below Grade Block Walls

Protect below grade block walls from water intrusion per code

\$ 5,000.00 Lump 1 \$ 5,000.00

Windows

Replace failed window system to prevent water intrusion per code

\$ 7.51 SF 52,775 \$ 396,340.25

External Insulation Finishing System

Repair damaged EIFS to prevent water intrusion per code

\$ 2,500.00 Lump 1 \$ 2,500.00

Code	Related Cost Items	Unit Cost	Units	Unit Quantity	Total
	Expansion Joint Caulking				
	Replace failed expansion joint caulking to prevent water intrusion per code	\$ 2,000.00	Lump	1	\$ 2,000.00
Roof Construction					
	Roofing Material				
	Replace failed roofing system to prevent water intrusion per code	\$ 4.89	SF	52,775	\$ 258,069.75
Mechanical- Electrical					
	Mechanical				
	Install code compliant HVAC system	\$ 29.03	SF	52,775	\$ 1,532,058.25
	Electrical				
	Install code compliant electrical wiring system	\$ 4.31	SF	52,775	\$ 227,460.25
	Install code compliant lighting system	\$ 1.00	SF	52,775	\$ 52,775.00
Total Code Improvements					\$ 2,585,060

Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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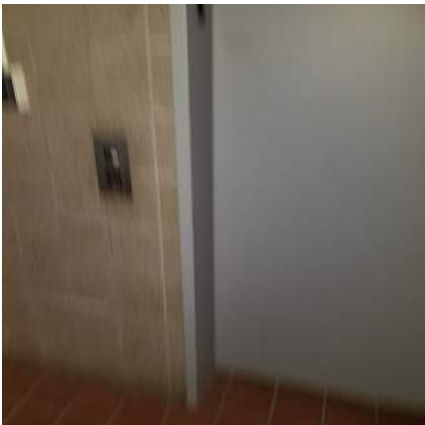
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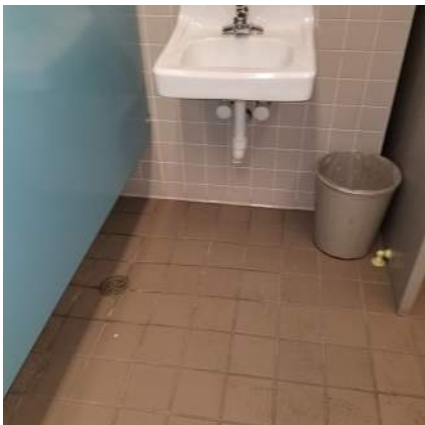
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Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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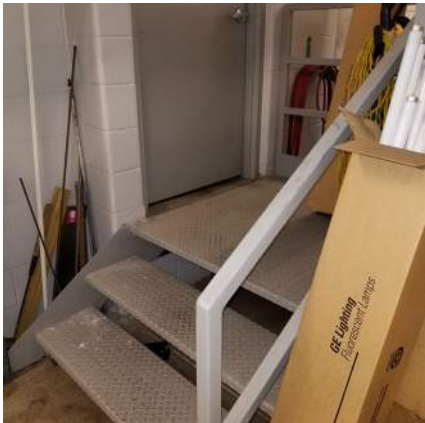
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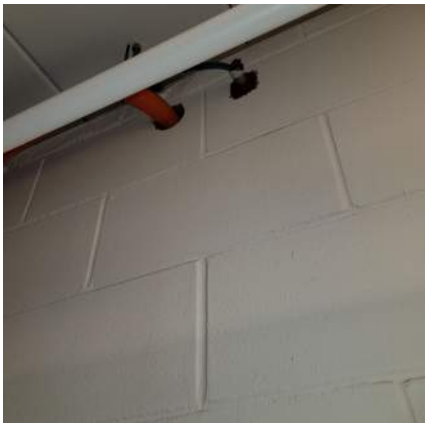
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Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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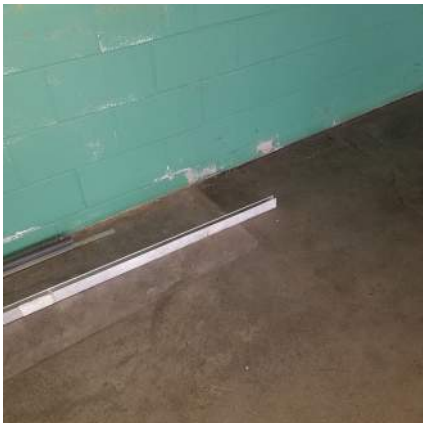
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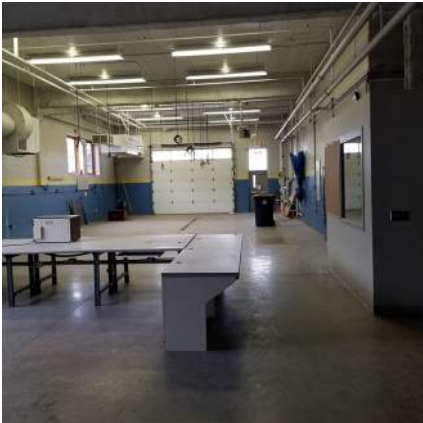


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Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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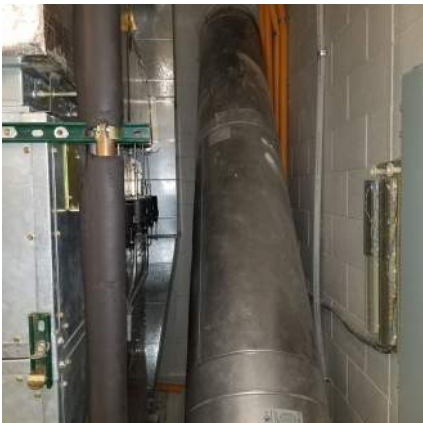
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Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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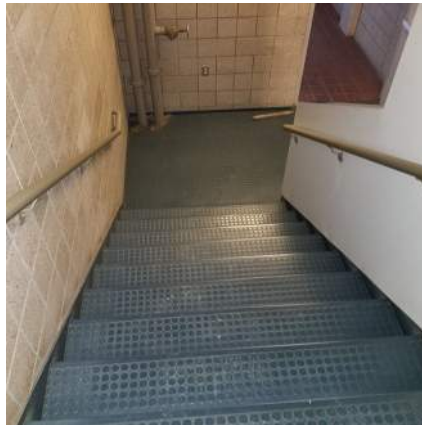
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Central High School Redevelopment TIF District | 802 E Central Entrance - Parcel B



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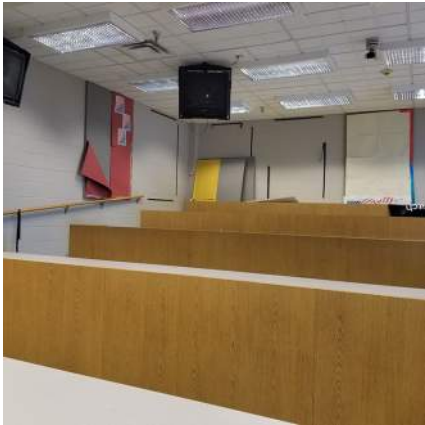
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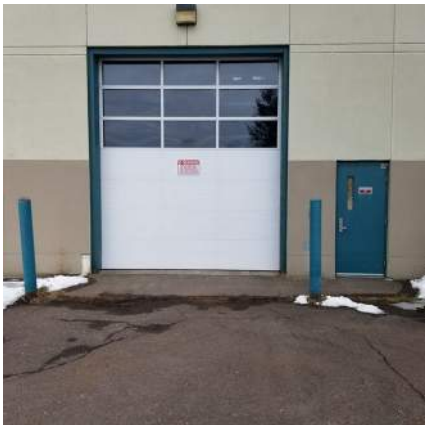
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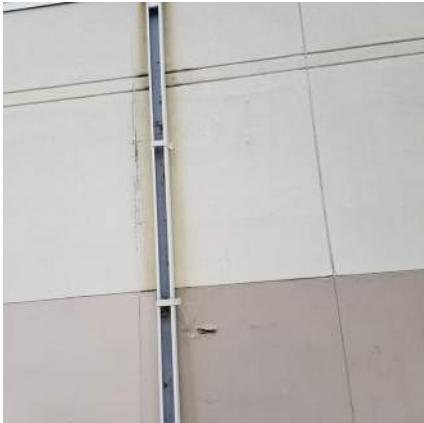


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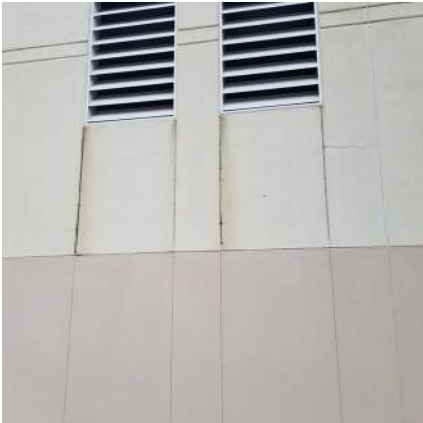


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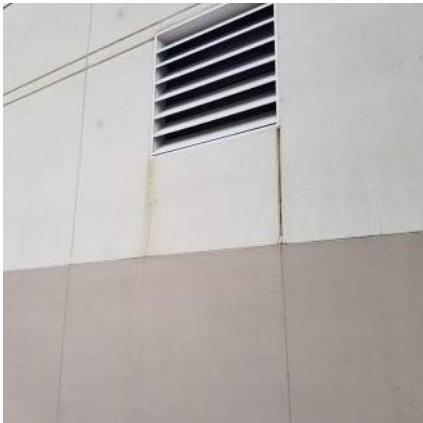
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